CIRM RFA-07-01

APPLICATION # CL1- 00506-1

STAFF ANALYSIS

FEASIBILITY:

Project Scope: The project will upgrade partially developed space in an existing research building to provide hESC laboratory and office space. The renovation work includes the addition of suspended ceilings, new walls, laboratory benches, cabinetry, and relocation and/or upgrading of water, air, vacuum, ventilation, power, data, alarm, and phone service. The area to be renovated includes eight adjoining rooms that will form a contiguous laboratory suite and one non-contiguous room. The plans provided in support of the project are architectural design drawings with the needed work indicated along with equipment placement plans.

The proposed improvements involve 2,280 gross square feet encompassing 2,007 assignable square feet (asf). The difference between gross and assignable would be the thickness of the walls since there is no circulation or non-assignable space involved in the project. A rough take-off from the drawings confirmed the square footages provided.

Project Management: The proposal identifies adequate construction management processes in place at the institution to oversee the work. It is noted that as the design progresses, deductive alternates will be identified to help manage the work within the approved budget.

COST:

A construction budget summary with 15 line items is provided to substantiate the construction amount of $893,000. Of the construction contract costs, $501,500 (58.7%) is for mechanical and electrical work, $114,000 (13.3%) for interiors, $20,000 (2.3%) for building shell, $170,500 (20%) for functional equipment, and $49,000 (5.7%) for demolition and site protection. Construction costs not part of the construction contract amounting to $37,972 include fixed equipment (two biosafety cabinets), controls commissioning, utility shut downs, and an owner-purchased builder's risk insurance policy. The design fees, administrative costs and project contingency represent 34 percent of the construction amount which exceeds the RFA budget guidelines of 25 percent. Thus, the proposal includes $84,000 in unallowable costs. The majority of this amount is due to the architectural fee being budgeted at 17 percent of the construction amount. If institutions wish to expend more than the CIRM budget guideline indicate, these costs can be funded exclusively by the applicant but cannot be considered part of the matching funds.

The overall cost per asf for the renovation work is $598. To convert this to a comparable figure for cost per gross square feet (gsf) in a typical research-intensive building, one

would assume an overall building efficiency of assignable-to-gross area of 60 percent. Thus, the 2,007 asf would equate to 3,345 gsf if one considers the full complement of building space (e.g. the gross building area including circulation and support) constructed to support the area renovated. Using this calculated gross area, the cost per gsf would amount to $359/gsf. This provides a more meaningful comparison to new laboratory building construction costs. We conclude that the average cost for new laboratory construction would be about $600/gsf, excluding land and site utilities. This amount would vary widely within California, but is being used here as an indicator of new construction value for comparative purposes. Based on this comparison, we conclude that the renovation work represents about 60 percent of the cost of new laboratory space. Based on typical guidelines the costs should not exceed about 65 percent of new construction in order to be considered a reasonably good investment. The relatively high cost in comparison to the average cost of new space can be partially mitigated given that the location of the project is in a relatively remote area with limited competition. Therefore, one would expect higher costs in comparison to statewide averages.

The applicant indicates that the shared laboratory would be able to accommodate the NIH-free laboratory space needs for 9 institutional-based Principal Investigators (PIs). Considering only the institutional-based PIs, the cost per PI would be about $133,000. Based on CIRM funding only (construction and equipment) the cost per institutional-based PI is $216,466.

The applicant has not addressed a commitment to any cost overrun issues.

TIMELINE:

The applicant began planning for the project as part of preparing the application. The project schedule indicates that preliminary plans and working drawings will be completed prior to grant award and a construction contract will be awarded about two weeks after award of the grant. The plan assumes construction activities take six months to complete with equipment installation and project close-out taking one additional month. If the award is made in July 2007, occupancy is planned for May 2008.

INSTITUTIONAL COMMITMENT:

The applicant indicates that the total matching funds of $392,765 for construction and equipment. The $200,000 in construction matching funds consists of a cash contribution of $183,028, prior expenditures of $15,972 for fixed capital equipment and prior expenditures of $1,000 for planning. The total amount represents 20 percent of the construction and equipment grant funding request, and meets the minimum matching requirement. However, as previously noted, additional institutional funding will be required to cover unallowable costs for design and other fees.

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HISTORICAL PERFORMANCE:

Data for three projects, completed between May of 2005 and April of 2007 and ranging in cost from $1.8 million to $4.1 million, were submitted as an indication of past performance. The final project costs were exactly as budgeted in all three cases. The actual completion dates were three to five months later than the original scheduled completion dates. The number of change orders ranged from 3 to 28, with values ranging from $3,678 to $189,260.

The applicant indicates that four laboratory renovation projects were undertaken in the last two years with a value of $16.6 million

RESPONSIVENESS:

Shared Laboratory: The applicant indicates that there are 9 institutional-based researchers at the host institution which is among the lowest number of Principal Investigators (PIs) at institutions requesting shared research laboratories. Some of the PIs that would use this laboratory are based at another institution that has also requested funding for a shared laboratory facility. It is not known to what extent approval of both projects would affect the planned utilization assumed by the respective institutions in submitting their request for a shared laboratory.

Technique Course: The applicant has not requested funding for a techniques course.

Facilities Work Group Issues

- **Costs-** How will the Facilities Working Group address un-allowed costs requiring additional institutional match associated with design fees that are higher than the RFA guideline by $84,000?

The grant management office will need to confirm that all conditions of the grant as indicated in the Grants Administration Policy have been met. This would include confirming that all past work is consistent with grant requirements for prevailing wage and other construction-related requirements. This includes confirmation that equipment funds are budgeted pursuant the Grants Administration Policy as adopted December 7, 2006.